

12. JUMPING SNAKES

I have only recently seen Mr. A. E. Butler's account of how the Russell's Viper, *Vipera russelli*, will jump to attack [*J. Bombay nat. Hist. Soc.* **55** (1) : 173].

I can state categorically that no known species of snake *deliberately* jumps off the ground to attack. But just as directly it can be stated that certain species of vipers in the act of striking do in fact *involuntarily* jump off the ground, but the jump is unintentional.

The vipers (or adders) are poisonous snakes with movable or hinged fangs which when not in use are folded back against the roof of the mouth. To get the fangs into striking position the snake has to depress the lower jaw, but this cannot be effected while the creature is flat on the ground. In consequence, the strike is made with an initial backward movement of the head, faster than the eye can see, to enable the fangs to move into the striking position, and at the same time the head comes forward in a flash to effect the bite. This forward thrust can be so vigorous that sometimes the snake, and particularly smaller ones, throws its body right off the ground.

The nature of this movement is well-illustrated by a vernacular name of the African Puff Adder, *Bitis arietans*, which refers to the snake 'which has to turn on to its back before it can bite'.

But the best exponent of 'jumping' in Africa is the Night Adder, *Causus rhombeatus*, a fairly slender species which rarely exceeds a length of two feet. I have frequently seen examples of the Night Adder lift themselves off the ground the equivalent of their own length, but by no means all will do this, in fact the majority do not. In order to reinforce the vigour of its strike this species sometimes inflates the anterior third or half of its body, and as it strikes it deflates with such force that the strike becomes a definite 'jump'.

I hope these remarks afford a satisfactory and convincing explanation of a snake's 'jump'.

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